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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/917,243	07/27/2001	Takao Nishikawa	9319S-000256	8940

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EXAMINER

MCPHERSON, JOHN A

ART UNIT	PAPER NUMBER
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1756

DATE MAILED: 08/07/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application N .

09/917,243

Applicant(s)

NISHIKAWA ET AL.

Examin r

John A. McPherson

Art Unit

1756

-- The MAILING DATE of this communication appears on th cover sh t with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 December 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 12 is/are allowed.
- 6) ☒ Claim(s) 1-11 and 13-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other:

DETAILED ACTION

Claim Objections

1. Claim 13 is objected to because of the following informalities: in line 13 "thereafterremoving" should be corrected to --thereafter removing--. Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3 and 5-10 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 2000-158551 (JP '551). JP '551 discloses a method for the production of a microlens substrate comprising the steps of forming microlenses on a substrate, applying an ultraviolet curable resin on the microlenses, laminating a thin transparent plate on the resin, and irradiating the laminate with ultraviolet rays while pressing with a transparent thick plate (corresponding to the reinforcing plate of the present invention). See the abstract and Figure 2.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-11 and 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 2000-158551 (JP '551) in view of JP 11-326603 (JP '603). The disclosure of JP '603 is discussed above in paragraph 2. However, JP '551 does not disclose fabricating the microlenses from a master plate and an intermediate plate as set forth in claim 13 of the present invention; or forming at least one of a black matrix, an electrode, and an alignment layer on the light transmitting (i.e. resin) layer. JP 603 discloses a method of producing a microlens array comprising producing a duplicating disk (corresponding to the intermediate plate of the present invention) from a master disc, and using the duplicating disk to manufacture each of the respective microlens arrays. See the abstract and Figures 1-6. Additionally, JP '603 discloses forming a black matrix, a transparent common electrode and an opposite facing film on the protective layer of the microlens array (based on an oral translation obtained by the Examiner). See Figure 9. It would have been obvious to one skilled in the requisite art to fabricate microlenses from a master plate and an intermediate plate, and to form a black matrix, an electrode, and an alignment layer on the resin layer, because it is taught that manufacturing microlenses from a master plate and an intermediate plate enables inexpensive production of many microlenses arrays from fewer costly master discs, and it is taught that microlens arrays provided with a black matrix, and electrode and an alignment layer are useful in liquid crystal displays.

Allowable Subject Matter

4. Claim 12 is allowed because in a method for fabricating a microlens array comprising forming a plurality of microlenses on a substrate, depositing a light transmitting layer precursor onto the substrate, disposing a flat reinforcing plate in close contact with the substrate, curing the light transmitting layer precursor in order to form a light transmitting layer, and removing the reinforcing plate, the prior art does not teach or suggest the method wherein the "disposing a flat reinforcing plate" step comprises disposing the flat reinforcing plate onto the light transmitting layer precursor to disperse the light transmitting layer precursor over the microlenses of the substrate, and wherein the "removing the reinforcing plate" step comprises removing the reinforcing plate from the light transmitting layer so that the light transmitting layer contains a flat surface.

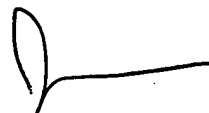
5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John A. McPherson whose telephone number is (703) 308-2302. The examiner can normally be reached on Monday through Friday, 7:30 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Huff can be reached on (703) 308-2464. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.



John A. McPherson
Primary Examiner
Art Unit 1756

JAM
August 5, 2003